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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,761	03/30/2004	Gen Koshita	KPM-02101	5275

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PATENT GROUP
CHOATE, HALL & STEWART LLP
TWO INTERNATIONAL PLACE
BOSTON, MA 02110

EXAMINER

CUNNINGHAM, TERRY D

ART UNIT	PAPER NUMBER
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2816

DATE MAILED: 09/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/813,761	KOSHITA, GEN	
	Examiner	Art Unit	
	Terry D. Cunningham	2816	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-12 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 1, 13, 14 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Summary of changes in this action

1. The objection to claims 19 and 20 has been overcome by the amendment.
2. The indefiniteness rejections have been overcome.
3. The outstanding art rejections in view of Tailliet have been overcome responsive to the amendment. However, new grounds of rejection as provided below are necessitated thereby.

Specification

The specification is objected to because the disclosure in lines 7-20 of page 23 is not consistent with the drawings. Firstly, the language stating that “switching unit 4 connects the charge pump circuit 1 and the charge pump circuit 2 in series in response to the switch signal MODE1 and the control signal SIG1 (emphasis added)” is inconsistent with Fig. 5. Figure 5 expressly shows that the “switching unit 4” is only responsive to SIG1. The “switching unit 4” is not responsive to “MODE1”. Since line 14 discusses the output of VPP1, it appears that this disclosure is intending to include the operation of switching unit 6. Thus, it is suggested that “switching unit 4 connects” in line 4 be changed to --switching units 4 and 6 connect--. And secondly, the language stating that the “switching unit 4 connects the charge pump circuit 1, the charge pump circuit 2 and the charge pump circuit 3 in series in response to the switch signal MODE2 and the control signal SIG1 and outputs the fourth voltage as an output voltage VPP2 to the 20 node X2” is inconsistent with Fig. 5. As seen in Fig. 5, switching unit 4 connects the charge pump 1 and the charge pump 2, whereas “switching unit” 7 connects charge pump 2 and charge pump 3. Therefore, to be accurate, “switching unit 4 connects” in line 15 of page 23 should be changed to --switching units 4 and 7 connect--. Appropriate correction is required.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 13, 14 and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Bayer (USPN 5,397,931).

With respect to claims 1, 13, 14 and 18, Bayer discloses, in Figs. 2-4, a circuit comprising: “a first pump circuit having a first capacitive section (C1)”; “a first node (between P15 and N16)”; “a second charge pump circuit having a second capacitive section (C2)”; “a second node (between P18 and N19)”; “a third charge pump circuit having a third capacitive section (C3)”; “a third node (A)”; “a switching unit (P13-P22 and N12-N19)”; “a first switch signal (output of I3)”; “a second switch signal (output of I1)”; and “a control signal (output of I2)”, all connected and operating similarly as recited by Applicant.

With respect to claims 19 and 20 are, clearly the above circuit to Tailliet will provide the recited method.

Allowable Subject Matter

Claims 2-12 and 15-17 are be allowable since none the of cited prior art references disclose that the boosting circuit further comprises “first” through “fourth” switching sections and the recited responsiveness to the “first switch signal”, the “second switch signal” and the “control signal”.

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC
September 19, 2005


Terry D. Cunningham
Primary Examiner
Art Unit 2816